55 miles an hour...

    Computers are not like cars. Cars need
constant pampering. The oil changed, gas,
radiator checked, etc. Computers, on the
other hand, can just be plugged in and for-
gotten. Right? Okay, so the disk drive heads
need a little cleaning every few months. And
the keyboard needs a Q-tip with alcohol rub-
down every year. Minor. Yet our computers
are acting like British sports cars! Hit it
on the side to read a disk, bang on the monitor,
replace a chip. Maybe their tire pressure is low...   February 1984

```
***********************************************************************
*                                                                     *
*    Side            Title              Filename      Turns Count      *
*                                                     CTR-41 CTR-80 CCR-81 *
*                                                                     *
*   ****         Bounce Cover              A         8/256   5/151   3/128 *
*  **   **       Tax83                     B        83/310  49/183  34/166 *
*  **   **       Pocket Puzzle             C       207/407 122/240  98/249 *
*   ****                                                               *
*                                                                     *
*    **          Graphical Analysis        A        16/247   9/146   6/122 *
*   ***          Algebra Equations         B       147/348  87/205  65/196 *
*    **          Space Blitz               C       215/403 127/237 102/244 *
*   ****                                                               *
*                                                                     *
*   Tape CLOADing Notes - This tape may load at an ODD RECORDER VOLUME.  Set the volume LOWER than normal for your first attempt,  *
*   then increase it slightly until the tape loads.  If the first copy of a program won't load, try the second.  That is why it is  *
*   there.  Model I only:  Put an AM radio very close to the keyboard, tune it to a non-station, and you can listen to the tape  *
*   loading in.  Adjust the recorder volume so the hash from the computer sounds 'cleanest' during a load.  Model III only:  Load  *
*   the tapes at the LOW speed (POKE 16913,0).                         *
*                                                                     *
*   Subscribers - The month on the mail label is the last month of your subscription.  If you have a cassette subscription, the  *
*   number next to the month is the amount it would cost to convert the rest of your subscription to the disk version ($4.20 per  *
*   issue for 6 or less months, $3.75 per issue if more than 6 months).  *
*                                                                     *
***********************************************************************
```

    Block party! Several blocks go bouncing and blinking around in
Bounce Cover (by David Jennings). A little ship comes out and 'draws'
the CLOAD logo, too! There is sound in this cover, so connect the large
grey AUX plug to an amplifier.

    Uncle Sam asked for it, you got it! Here is a form 1040 helper (by
Bernard Geddry) called **Tax83**! The program also does Itemized Deductions
(Schedule A), Income Averaging (Schedule G), and Married Working Couple
Deduction (Schedule W). Mind you, you should have your 1040 form right
there to fill in the blanks as you go. You can't go back and fix a
previous error (but the program is so easy to use that running it a
second time is not a problem) and you do not get a hardcopy of the
output. We went over the program several times, checking for accuracy
and/or bugs and found it to be okay. Just a few notes:

    1) Do **NOT** put commas in your numbers.
    2) If you enter the word **SUM** in answer to line 7 (Wages, salaries,
tips, etc.), you can enter and automatically sum several values. To stop
entering values, simply type Ø<enter> when asked **WAGE?**.
    3) When answering a yes/no question or choosing a menu item, you do
not need to hit the <enter> key.
    4) You can hit <enter> to give a Ø answer to any question.

Will my TRS-80 fit next to my wallet? **Pocket Puzzle** (by Kevin Neelands) simulates one of those little plastic puzzles you probably had with 1 blank space and 15 sliding squares. The object was to slide the little squares around until you could (hopefully) get the squares in order. Well, this game has 24 squares and one blank space. The completed puzzle is shown on the left and the scrambled puzzle is on the right. After you have pulled out all of your hair getting the puzzle unscrambled, the computer takes a turn and 'descrambles' the puzzle, calmly comparing the number of turns it took you to the number of turns it took. P.S. I hope Kevin stayed awake nights devising the little sayings that make up each puzzle.

Dropping a line – **Graphical Analysis** (by Pat Lucas) takes any data that can be put on an XY graph, and does it! When you run the program, you'll get the Main Menu. You should first label the graph axis, then input data for the plot (the computer will sort the points along the X axis). Now you can review data on the screen (this is where the fun begins!). You'll see a graph with your points plotted and a sub-menu at the bottom of the screen. Here are the functions of that menu:

Menu – Go back to the Main Menu.
L.B.F. – Draws the Line/Curve of Best Fit. Once you choose this option, then you must choose which line/curve to draw (First Degree, Exponential, or Logarithmic). Then hit any key to get back to the sub-menu.
Renew – Redraws the graph with the points only.
P. to p. – Draws a line from point to point. If two points have the same X value, no line is drawn between them.
Change – Here is where you can change, add, or delete points from your graph. Once you have chosen this option, you must then choose **C** (for change, delete, or restore) or **A** (for add). If you hit:
    A – You can add points to the graph (they are resorted afterwards).
    C – Then you hit any keys to see the few lines of options. Next use the left/right arrow keys to move from point to point. When you are at the desired point, hit
        D to delete it.
        R to reinstate it (after deleting it).
        N to change it (you'll be asked for a new X and Y).
Hit **E** when you are finished changing points.
Hold – Toggles the screen blink/not-blink.
Info – Then you choose:
    V – View the points using the left/right arrow keys.
    I – Gives the X, Y, and coefficient of the three best-fit functions. You can then choose to calculate other points with those functions.

Note: The Main Menu allows you to send a graph to a printer, but we aren't sure which printer it will work with. Try it on yours. If it works, great!

One plus one does not equal **Algebra Equations** (by Paul Labonski). You get to practice simple algebra problems in addition, subtraction, multiplication, division, or a combination of all four functions. You will be shown a problem like **(1X / 7) + 13 = 18** and you must type in the correct answer (my dad says it's 35, and he's NEVER wrong). If you get a wrong answer, the computer will show you how to get the right one (maybe that's how my dad knew the answer...).

I prefer cheese... You must slide your ship back and forth with the

1 and **2** keys to avoid the enemy ships as they drop in **Space Blitz** (by William Schadlick). You can fire at the ships above with the **0** key, but be far enough away from the enemy ships as they hit the ground to avoid the shrapnel. The game has sound, so connect the large grey AUX plug to an amplifier.

Let's communicate...

Some things are obvious to me, but I forget that I've been involved with computers about 10 years. So I didn't mention that you need an RS-232 to use last month's **TSOTERM**. If you have a Model I, you have to have purchased the RS-232 separately at some time.

Controlling bouncing...

Clifford Mui of Kamloops, B.C. Canada didn't like the way the X handled in last month's **Bouncer**, so he suggested the following:

Add **A$=INKEY$:** after **M=PEEK(15100):** and change the **IFM=64** to **IFA$=CHR$(9)ORM=64** in lines 60, 160, and 200.
    Change the **IFM=32** to **IFA$=CHR$(8)ORM=32** in lines 65, 165, and 205.

32 character problem...

When we first tested this month's **Pocket Puzzle** on a Model III, we couldn't figure out why the author would send us a game that printed the puzzles incorrectly on the screen. So we fixed it and it looked great! Then we tested it on the Model I. And, of course, it looked horrible. So we did a hatchet job to get it to work on both the Model I and III. Then we went back to find out why the difference, and here is what we found:

When you are in the 32 character mode, there is a bug in the Model III **TAB** function (the Model I works correctly). Try the following program on a Model III:

```
10 INPUT T: CLS
20 PRINT CHR$(23);TAB(2);"TWO";
30 PRINT TAB(T);"X"
40 GOTO 10
```

The TAB in line 20 works correctly (the word TWO will be printed in columns 2, 3 and 4 on the screen). However, the TAB in line 30 will not work right. If you input **6** for T, an X should be printed in column 6. However, the X gets printed in column 5! It turns out that the 32 column position of the cursor is subtracted BEFORE the TAB is done on a Model III! To correct this, you must add the previous 32 column cursor position to the TAB value. The first TAB you do in a line works because the previous 32 column cursor position was 0. For example, to have line 30 in our above example work correctly on a Model III, change it to:

```
30 PRINT TAB(T+POS(0)/2);"X"
```

where POS(0)/2 is the previous 32 column cursor position. Now, we have correct TABbing on a Model III, but it will make hash out of a Model I. So add a check for Model I or III to line 30 to have the 32 column TABs work on both machines:

```
30 PRINT TAB(T+(PEEK(84)<>1)*-POS(0)/2)
```

(TAB) Spacing out, *Dave*